BREAKOUT

The Newsletter of the Hastings and Napier Amateur Radio Clubs

Hastings Branch 13 NZART – Napier Branch 25 NZART

Volume 22, Issue 2, February 2022

Hastings Br 13 Club Calls
ZL2AS
ZL2QS

Napier Br 25 Club Calls
ZL2GT
ZL2G

IRLP Node 6793 147.250

Branch's 13/25 Net
9.00 AM Sunday Morning
670 Repeater

Editor
John Newson
ZL2VAF

Taraponui Visit.

on 30 Jan 12 people took the opportunity on a perfect day to visit the 725 repeater site (4300 ft ASL) inland from Lake Tutira HB. Because it was such a perfect day Warren and Ada (from Palmerston North) needed an umbrella to shelter from the sun ..... as the picture shows ... while they were working SOTA.
David ZL2DW

http://www.zl2gt.nz/ http://www.zl2as.org.nz/

Emergency Call-in Frequencies: 3615khz and 670 repeater

NAPIER BRANCH 25

President:	***Dave Crook ZL2MQ,***	***02102969006***	***email davey.crook@gmail.com***
Secretary:	***Bryce Gilbert ZL1BCG***	***027 27764928***	***email zl1bcg@gmail.com***
Treasurer:	***Stuart McLeod ZL2XC***	***8445706***	***email stushe@slingshot.co.nz***
AREC:	***Mike Bull ZL2VM***	***843 6052***	***email rlb.mbb@xtra.co.nz***

Committee:

Revell Troy ZL2SS	***0210742837***	***email revelltroy@hotmail.com***
Michael Mullins ZL2MY	***8434210***	***email michaelmullins@xtra.co.nz***
Peter Breen ZL2CD	***0274721527***	***email peterbreen@clear.net.nz***
Karl Matthys ZL1TJ	***845 4372***	***email karl@waspnet.co.nz***

Committee Meetings: ***7:30 pm, 3rd Tuesday of January, March, May, July, September, November***
Club Calls: ZL2GT, ZL2G
Club Web Site: http://www.zl2gt.nz/

Club Nights: First Wednesday each month (except January) 7.30pm at the Club Rooms: 123 Latham Street Napier

Napier Amateur Radio Club

Last meeting we tried out our new display monitor, and I pulled up a really useful calculator for mag loop antennas, it was suggested that the address should be included here, so here it is: https://miguelvaca.github.io/vk3cpu/magloop.html.

This calculator will answer any queries you have as to tuning capacity, voltage and current ratings required and efficiency of your loop. You can enter (by way of sliders) the diameter of your loop and the size of the material you choose, as well as aluminium or copper and whether you want single loop, 2 parallel loops, or a coil like loop.

Speaking of mag loops, I think I may have caused a bit of a mischief with my current one as it has gone all quiet on me, I may have exceeded the voltage rating of the insulators AGAIN, so will need to tear it down to find out what happened. I needed to do this anyway as it needs to be redesigned using the above calculator.

The Club has been donated a sizeable quantity of ham radio gear and accessories, this is all at the clubrooms, and I propose a night for viewing and buying, any reasonable offer considered.

As Wednesday the 23rd is Hastings branch meeting I propose the 22nd as the night, say 7:30pm at the clubrooms. Any unsold items after a couple of weeks will be disposed of on trademe. Proceeds to Club funds, with a suggestion that we upgrade the shack with a new radio and computer for logging and digital modes. The long wire aerial that we attempted to install will be retried with a higher ratio balun, when it arrives, Thanks Mike ZL2MY.

The next meeting is at Latham Street 7:30pm 2nd March 2022.

Hope to see you all there
73 Dave ZL2MQ

HASTINGS BRANCH 13

President:	Blue Smith ZL3TT	Ph 027 220 3724	email: kgsmithblue@nowmail.co.nz
Vice President	Robert Wallace ZL2SG	Ph 878 4993	email ffonzrjw@gmail.com
Secretary:	David Walker ZL2DW	Ph 876 0518	email david@apexradiocoms.co.nz
Treasurer:	Peter Moore ZL2HM	Ph 06 68577340	email: pikam@xtra.co.nz
AREC/CD	John Newson ZL2VAF	Ph 027 230 3642	email: zl2vaf@gmail.com
AREC Deputy:	Robert Wallace ZL2SG	Ph 878 4993	email ffonzrjw@gmail.com
Committee:	Ray Barlow ZL2RB	Ph 06 878 6068	email: r.w.barlow@xtra.co.nz
	Rob Leicester ZL2US	Ph 878 6381	
	Peter Keong ZL2PW	Ph 027 217 1315	email: pkeong@xtra.co.nz
	Brendin Graham-Ireland ZL2SB	Ph 027 777 2262	email: brendingi98@gmail.com
	Stephen Simpson ZL2SPF		

Hastings QSL Distribution: Wally Shuker ZL2MO Ph 843 5497 email ZL2MO@hotmail.co.nz
Magazine Editor: John Newson ZL2VAF Ph. 027 230 3642 email john@thecomputerman.co.nz
NZART License Examiners: Peter – ZL2HM, Dave – ZL2MQ, Ray – ZL2RB
Club Call: ZL2AS and ZL2QS

Club Nights: Fourth Wednesday each month at 7.30 pm Pakowhai Hall, Pakowhai Road, Pakowhai

From the top table

Hi all and here we are in a very different world today. With all these folk down in Wellington, it makes me wonder what is going to be the outcome of it all. I for one will not put myself in that group as the government are doing what they can to try and protect all of us not just a few who think the rest of the country should follow them.

It is so hard to not get all heated up over it all so I guess we just have to take care of each other and do what is asked of us to stay safe.

Back to radio stuff and I have been working the bands as much as I can with 15meters open and 20 not to mention 10 as well. Some of the bands are very good with s9 or better coming in to my home and the rotater has been getting a good work out.

The Club is doing well and we do have a very good membership but as a club we do need input from you the members to make it work and come up with some ideas that will help the Club. It does not matter how silly it may sound to you it may be of interest to someone else. It may even help some one that might be having the same problem that you are working on and with the help of other members it can be worked out. Bring it forward and lets see what can be done to fix it for you.

At the beginning of this month a group went up to the site of 147.250 and what a view you can get from up there. Some great photos were taken and the Sota guys had a good time. Rob ZL2US made lots of contacts from his car even though he had to go down the hill a wee way

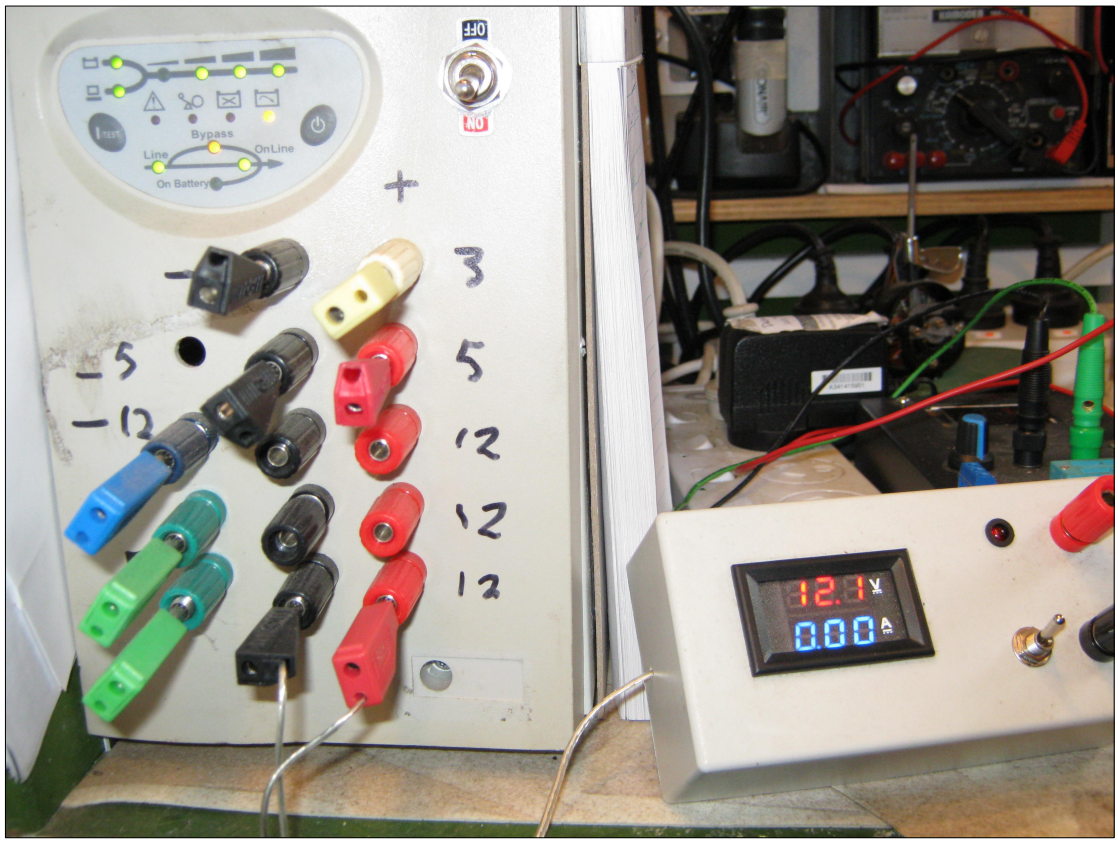
to get away from the noise. Definitely not a good place for HF.

Well that's it for this month.

Blue ZL3TT President Branch 13 HBARC

Branch 13/HBARC, Hastings, office bearers,
David Walker ZL2DW (Secretary),
Blue Smith ZL3TT (President),
Peter ZL2HM (Treasurer).

A bench power supply



We all need one .

In my case I have used a computer power supply .

This one is the mark 2 , because I blew up the first one, which did have a negative five volt rail , such is life.

Now this case as you can see in the photo , came into the scrap yard as an uninterrupted power supply, which I took out all of the parts, and was allowed to keep the case , light gauge scrap steel is almost worthless.

The batteries and the circuit boards and the copper wire do have some value.

The display is all lit up because I understand how to work out the voltage drop across led's and select the correct feed resistor.

It's pretty but it tells me that all the voltage rails are running.

Now in the small box you will see are my voltage and current display.

You can buy these units from overseas .

I put it in a box with a on off switch and led.

If you buy one of these, there are four different types, you wont know which one you will get.

You have to be aware of the different types and there's a website for this .

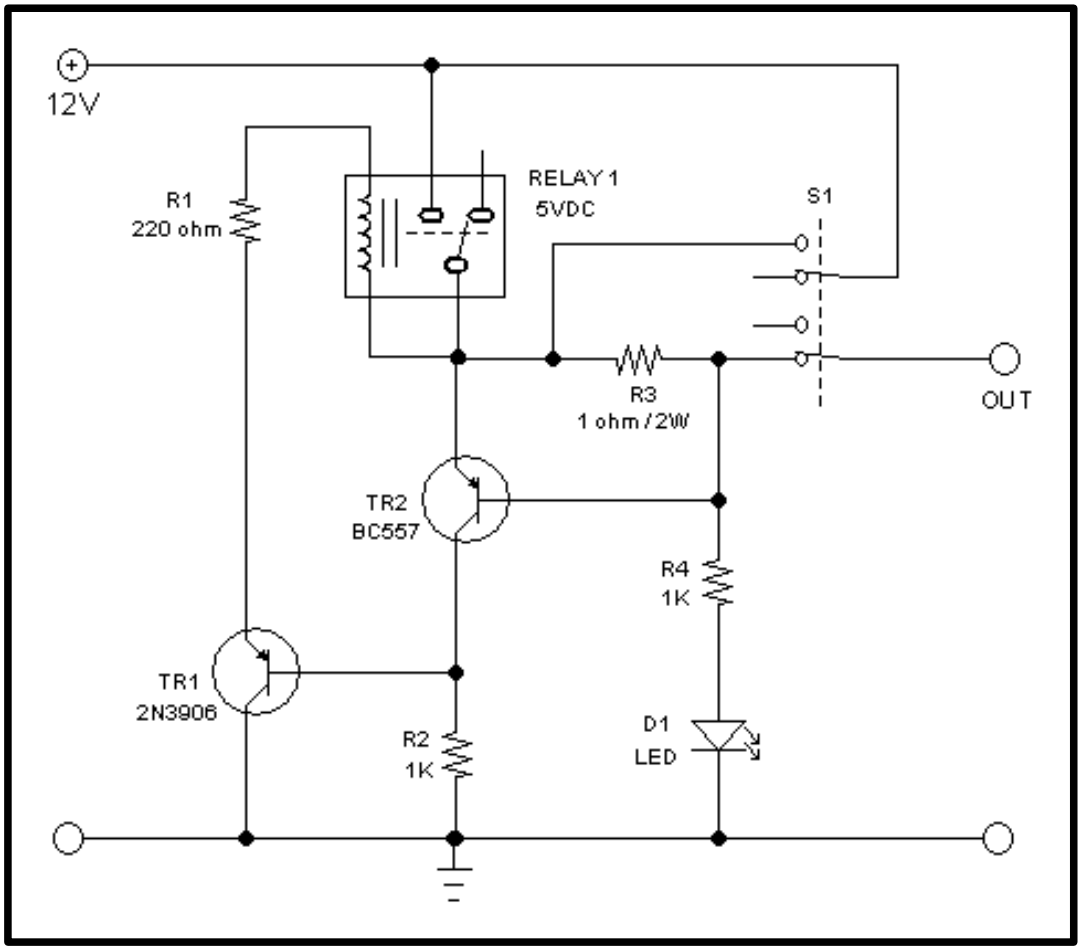
There are two white sockets on the back of the PC , depending on where they are, and how they relate to each other, and the colours of the three wires on one plug, and the wires thickness on the two wires plug and the three plug tells you which wire goes where .

As I said, there is a website , which shows all four pictures so I built it up and it had a little switch on it that switches the positive rail on off.

Now with these circuits, they use the negative rail to measure the current flow.

That's OK .

Now all computer power supplies , like I have learnt the hard way , with the first one, they have no protection on the output rails.
When you playing around on the bench you can put a short on the computer power supply , BANG .
It takes out maybe the chopper and the voltage regulators on the output side and every thing was now toast .
So I had to rebuild it , got a working computer power supply from work swapped for my old one.
It took 2 days to install in my case .
This time I put a row of fuses on the back .
I was working on a electronic train whistle as you do , and I could only get 2 out of the 4 op amps to run and all the sudden I got nothing .
when I looked at the display lights some have gone out .
Blown fuse.
So I took the plugs out the bottom socket , (12 volt's) and jump them up one on the power supply , all was OK, so away we went .
So I decided to upgrade my little box that I had in front of me , because when I'm working the main power supply is behind me.
Now Errol had described to us one night having built one of these reset semiconductor fuse systems things, for his power supply .
His was very fancy , that used a very fancy transistor that did weird things .
But I found this circuit on the internet .



It uses a relay (all parts I have in stock , from scrap TV power supply's) so I built it up and fitted in to the box.
I replaced the switch in the front with a dpdt one.
This circuit uses pnp transistors, not used much today .
So I used some similar ones I had on stock .

I didn't have a 5 Watt 1 ohm resistor so I had to run down to my friendly electronic shop and buy one .

As I said I have a bit of stuff , that you never know when you're going to use them.

It did not work of cause , and had me running round and round in the circuit.

In the end I thought that the relay was not being pulled in .

So grabbing a 100 ohm resistor out of the box, bridging across the existing current limiting resistor from the relay down to the transistor and there was a click as it pulled in .

So if you look at the circuit you can change the resistor coming out of the relay going down to the collector of the transistor to 100 ohm and it seems to work.

Now the switch as shown is in the run position .

You must flip up into the set position to supply 12 volts to the transistors so that they can pull in the relay.

You then switch back to the run position to supply voltage to the output positive socket.

I fixed the power supply , I took out the fuse and replaced it.

The fuse is 2 .5 amps .

The circuit with a 1 ohm current sense resistor gives me two amps before the relay chops out and we go forward with the toes crossed that I won't blow up the power supply second time.

Off inside for a coffee and a bickie .

73 Eric

The next Branch 13/HBARC meeting

The next Branch 13/HBARC meeting will be on Wednesday, 23rd February 7-30pm at Pakowhai Hall. There will be a change in format... Robert ZL2SG will be first up, across the road showing us what he does in his job regarding power pole testing. This will be followed by the normal monthly meeting, All welcome.

RSM FEES Sponsorship

If anyone would like to sponsor the RSM annual fee to Br 13 for one of our repeater licences ($50 each) please contact David ZL2DW.